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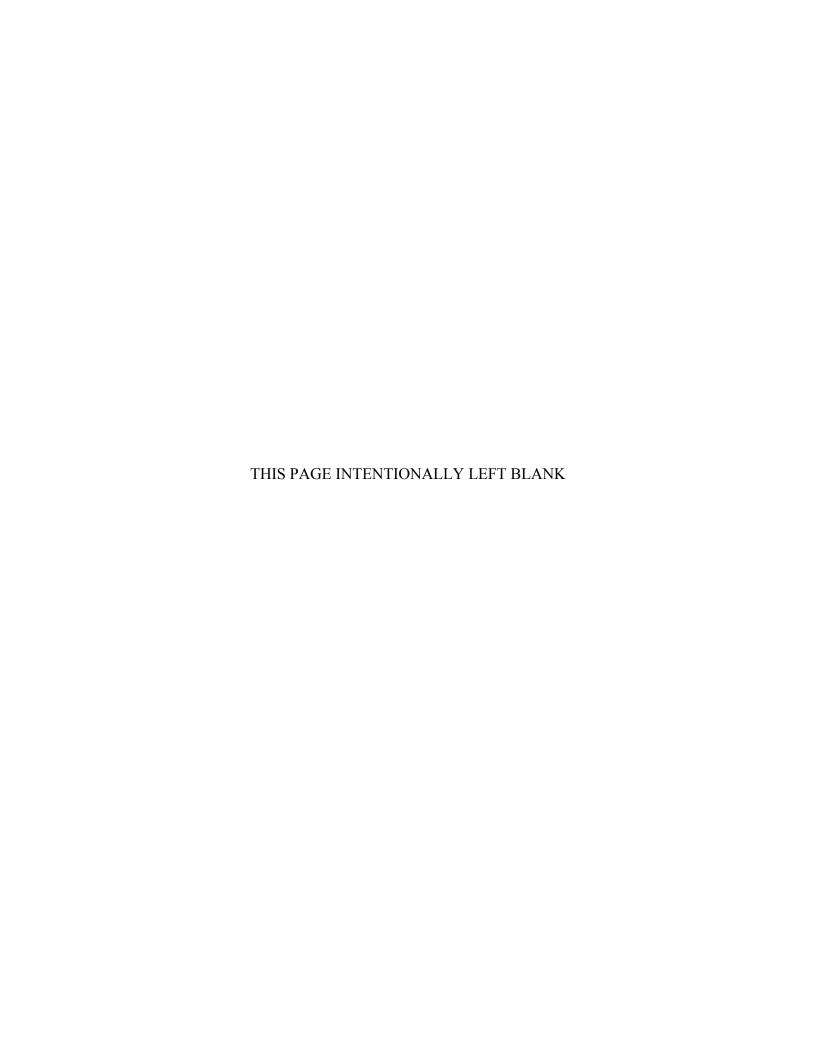
MBA PROFESSIONAL REPORT

Threats to and Alternatives for Financing Social Security

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December 2003

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This project identified the problems with and threats to the Social Security program caused by the rapid increase in aging of the population. It compared and contrasted the traditional system with different proposed alternatives. The author recommended three basic options in a priority order for improving economic growth and personal control, while ensuring fairness for future American generations. The three recommended options are: (1) Privatization (2) Raise the payroll tax and increase the number of years for calculating benefits and (3) Raise the payroll tax rate.

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THREATS TO AND ALTERNATIVES FOR FINANCING SOCIAL SECURITY

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Submitted in partial fulfillment of the requirements for the degree of

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ABSTRACT

This project identified the problems with and threats to the Social Security program caused by the rapid increase in aging of the population. It compared and contrasted the traditional system with different proposed alternatives. The author recommended three basic options in a priority order for improving economic growth and personal control, while ensuring fairness for future American generations. The three recommended options are: (1) Privatization (2) Raise the Payroll Tax and Increase the Number of years for calculating benefits and (3) Raise the Payroll Tax Rate.

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I. INTRODUCTION

A. PURPOSE

This research will analyze the impact of the Social Security Program on the economy, retirement benefits, fairness of the program, and the risks associated with the program. The research will include an in-depth analysis of the current Social Security program, followed by different options. The objective of the research is to analyze and compare a number of alternatives, then select, and recommend the best one.

B. DISCUSSION

On June 8, 1934, President Franklin D. Roosevelt, announced his intention to provide a program for Social Security. He formed the Committee of Economic Security (CES), composed of five top cabinet level officials to study the entire problem of economic insecurity and to make recommendations that would serve as the basis for legislative consideration by the congress. In January 1935, the CES reported to the President, and on January 17th the President introduced the report to both Houses of Congress. After months of debate and intense deliberation, the President signed The Social Security Act into law on August 14, 1935.

Since then, Social Security has grown to become, by far, the largest federal program. Coverage has expanded, benefits have increased, and the program has been broadened to include benefits for workers' spouses and minor children, for the survivors of deceased workers, and for disabled workers. The federal government currently pays monthly Social Security benefits to more than 45 million retired or disabled workers, their families, and their survivors. Those benefits will cost the government a total of about \$430 billion this year, roughly one- quarter of the entire federal budget. (Ref. #1, pg1)

Over the next 30 years, the retirement of the baby-boom generation will pose new challenges for the Social Security program, the federal government, and the U.S economy. The Social Security Administration projects that the number of people age 65 or older will rise by more than 90% in the next decades (from 36 million now to 69 million in 2030), according to its intermediate assumptions. During the same period, the number of adults under age 65, who will largely be the ones paying the taxes to support

their elders; will grow by only about 15% (from 170 million to 195 million). Moreover, the number of elderly people is expected to keep rising more quickly than the number of non-elderly people, as life spans continue to lengthen. (Ref. #1, pg1-3)

This background helps one consider how to prepare for the retirement of the baby-boom generation and beyond. The objectives of this project are to: identify the problems of and threats to the Social Security program, with the increasing aging of the population; compare and contrast the current system with different proposed alternatives; and to recommend the best program to increase economic growth and personal control, while preserving fairness for the American people.

C. RESEARCH OUESTIONS

1. Primary Research Questions

- a. Is there really a Social Security crisis?
- b. If there is a crisis would privatization help?

2. Subsidiary Research Questions

- a. Can Social Security afford to pay what it promises?
- b. How is Social Security financed?
- c. Won't the trust fund help pay benefits?
- d. Does Social Security treat everyone equally?
- e. Can ordinary workers invest wisely?

D. SCOPE OF THE PROJECT

This project will include: (1) a broad examination of the economic, social, political, and budgetary aspects of financing Social Security (2) the benefits and problems of different alternatives for Social Security compared to the traditional method and (3) suggestions and recommendations about the best way of financing Social Security.

E. METHODOLOGY

The methodology used in this research consisted of:

1. A literature review of

- a. federal government documents,
- b. reports, studies and analysis (both public and private),

- c. journal articles and books, and
- d. executive and legislative branch activities
- **2.** Collection of data concerning Social Security legislation and discussions (debate). My collection focused upon the size, scope, and financing of this program, and how it has evolved.

F. ORGANIZATION

Chapter I: Introduction, Background

Chapter II: Social Security Program

Chapter III: Alternatives for Financing Social Security

Chapter IV: Analysis of Alternatives

Chapter V: Conclusions and Recommendations

G. BENEFIT OF THE STUDY

This project provides recommendations on the best way to handle the growing threats to Social Security with the rapid aging in the United States population by comparing viable options.

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II. THE SOCIAL SECURITY PROGRAM

A. THE PROGRAM AND THE PROBLEM

Social Security is a contributory Social Insurance Program: everyone pays in and everyone receives benefits. The Social Security Act was passed in 1935 and the first benefits were paid in 1940. It is financed by a 12.4 percent tax on wages up to \$87,000 (increases annually). It is the biggest tax most households pay. The Social Security program provides retirement, survivors and disability benefits to eligible workers and their families. It is the largest government program in the world, taking up almost one-quarter of the total federal budget. Without change, it could eat up to 29 percent of the budget by 2020, 34 percent by 2030, and 36 percent by 2075. (Ref. #2, pg3-4)

Most Social Security revenues come from payroll taxes. A smaller amount comes from taxes on benefits, while the trust fund is credited with interest each year. Social Security is a "pay-as-you-go" system: taxes collected from today's workers are used to pay benefits for today's retirees. For that reason, Social Security's finances are very sensitive to the number of workers paying into the system and the number of retirees collecting benefits from it. The "aging" of the population means there are larger groups of retirees to be supported with smaller generations of new workers to support them. Demographics—particularly birth rates and life expectancies are the key to Social Security's financing problems. Low birth rates mean fewer new workers. Increasing life expectancies mean more retirees to support. Future retirees will live years longer than today's 65-year-olds and collect thousands more in benefits. In the future, fewer workers will support more retirees. As a matter of simple math, when the ratio of workers to retirees falls, each worker must bear a greater financial burden. (Ref. #2, pg7-8)

Technically, the government's bonds in the Social Security's trust fund will help pay full benefits until 2041. But why do we say "technically"? Because the Social Security trust fund is full of government IOUs, and the only way to turn those IOUs into cash is to raise taxes, cut spending, or borrow. Experts say: The Social Security trust fund is not a net asset the government can use to pay benefits.

While the bonds held by the trust funds are assets from the vantage point of the Social Security and Medicare programs, from the viewpoint of the unified budget they are liabilities of the U.S. Treasury. No one doubts the

U.S. Government will honor the bonds. But since the U.S. Treasury is the ultimate payer of the programs' benefits and the trust fund assets are also debts of the U.S. Treasury, neither the interest paid on the bonds, nor their redemption, provides any new income to the U.S. Treasury. When annual revenues from earmarked taxes for Social Security and Medicare begin to fall short of annual expenditures, such short falls inevitably must be made up by increased taxation, increased borrowing (i.e., the sale of more U.S. Treasury bonds to the public) and /or a reduction in other government expenditures. This fact is the basis for the view that trust fund assets have no "real" economic value. From unified budget viewpoint, the trust fund surpluses are a budget accounting device and make no meaningful contribution to funding future Social Security or Medicare expenditures. They simply reflect the fact that in the past, surplus Social Security and Medicare revenues have been used by the U.S. Treasury to fund other government programs or to reduce outstanding Federal debt. (John Palmer and Thomas Saving, Social Security Public Trustees, 2002)

The trust fund is an asset to Social Security but an equal and opposite debt to the rest of the government. From the point of view of the government as a whole and to the taxpayers-the trust fund makes no difference. The question isn't whether we will honor the trust fund's bonds; every-reform legislation in existence would repay them, the question is how we will do it. That is why people argue that Social Security's problems begin in 2017, when the program starts running payroll tax deficits, not in 2041 when the trust fund runs out. (Ref. #2, pg19)

Some people think we can borrow to get Social Security "over the hump" of Baby Boomer retirements. But Social Security's problems will continue to grow larger even after the Boomers are gone. Borrowing doesn't reduce Social Security's deficits; it is just a stealth tax increase on our children and grandchildren. That's what Social Security reform is supposed to avoid. If we borrowed to cover Social Security's deficits, the debt would exceed \$7 trillion (in today's dollars) by 2040, \$14 trillion by 2050, and over \$47 trillion by 2075. This would be larger than the national debt at the end of World War II (as a percent of GDP) and would cripple the U.S economy. (Ref. #2, pg21)

Social Security's benefit structure is stuck in the past: it assumes that husbands will earn the wages while wives will remain at home, and it punishes couples who do not accord with this 1930s norm. A spouse is entitled to her own benefits or benefits equal to one-half of the higher earning spouse- but not both. Working women pay an eighth of

their wages as taxes, yet 63 percent receive no additional benefits for the taxes they pay. They could have received just as much by not working and simply accepting the spousal benefit. Social Security rewards single-earner families over dual-earner families, even though single-earner families often have higher incomes. Spousal and Survivor benefits are extended only to ex-spouses married 10 years or more. Marriages ending in divorce have a median length of just 7 years, and fully one-third of all marriages end prior to the 10 years needed for benefit eligibility. (Ref. #2, pg27-29)

Social Security benefits last as long as you live, so most benefits go to those who live the longest. High income Americans who tend to be white tend to live longer than African Americans, who have lower incomes on average. As a result of shorter life spans, African Americans receive nearly \$21,000 less from Social Security over their lifetimes than whites with identical incomes and family profiles, identical people, but very different results. Nearly half of all marriages among African Americans are disrupted by divorce in less than 10 years, making them ineligible for spousal benefits. A greater number of African American women do not remarry after divorce. The Supreme Court has ruled that individuals have no legal right to their benefits. This may give "flexibility" to the government, but it denies security to workers and retirees. It also encourages politicians to make promises today that they may not be able to keep tomorrow. (Ref. #2, pg30)

The Social Security program does have a financial problem. The actuaries at the Social Security Administration project that if no action is taken, Social Security will run out of money around the year 2034 (using the intermediate assumptions). However, that doesn't mean that Social Security won't be able to pay benefits at that time. According to the intermediate projections, when 2034 arrives, payroll taxes will still be enough to pay 71% of the benefits. Another set of assumptions is more optimistic (the funds don't run out) and another set is more pessimistic (funds run out in 2034), but most people agree that the intermediate assumptions are the ones on which to base our decisions. (Ref. #3, pg7-8)

Social Security's financial problems are due in part to the very large baby boomer generation and longer life spans. When Social Security was first created, it was called "Old Age Insurance". Life expectancies were less than age 65 and retirement was a contingency. Today life expectancies are greater than age 75, and every one talks about "when" they retire, not "if". In fact, someone who is already age 65 can expect to live into his or her 80's. Due to these longer life spans and the retirement of the baby boomer generation, there will be fewer workers supporting more retirees in the future (unless we make some changes). For instance, today there are almost 3 ½ workers per beneficiary. By 2034, the 3 ½ will decrease to just two workers per beneficiary. But 2034 is many years away. Why are we so concerned now? (Ref. #3, pg8) Because, in 2008, the very large boomer generation can start receiving Social Security retirement benefits (1946 + age 62 = 2008), which can cause major problems with the U.S Budget. In order to avoid deficits, we may need to have Social Security changes in effect by 2008. (The problems are due to the interaction of Social Security with the U.S budget.) Currently Social Security receives about \$70 billion more than it actually uses. (If one also counts the interest that the Treasury pays on Social Security's government securities, this number is over \$120 billion.) Beginning around the year 2008, when the baby boomers start to retire, the \$70 billion in extra taxes from Social Security will start going down, and will reach zero around the year 2014. This could cause deficits, which means we would have to either increase taxes or decrease government programs at that point. We shouldn't wait until then to decide on the changes. We need to fix Social Security sooner rather than later. (Ref. #3, pg8)

The financial structure of the Social Security program has resulted in a redistribution of resources between generations: each generation of workers pays taxes that are largely used to make payments to the people already eligible for benefits. From Social Security's earliest days, a contentious issue was whether the benefits that workers and their families received should be pre-funded, using the taxes that those workers paid, rather than funded using taxes paid by current workers. As the program was enacted in 1935, revenues dedicated to Social Security would have exceeded outlays by enough to build up very large surpluses. In effect, those excess revenues would have helped fund, in advance, the benefits that the same workers would receive later. Opponents of prefunding argued that such an arrangement would result either in pressure to increase

spending or in federal government ownership of private assets. Later expansions of the program, along with postponement of increases in the payroll tax rate that were originally scheduled to occur during the 1940s, essentially moved Social Security to a pay-as-you-go basis. That pay-as-you-go structure has worked, although with many changes in taxes and benefits along the way. However, it has worked largely because the labor force has grown rapidly during much of the program's history. That situation is about to change, as the number of Social Security beneficiaries begins to increase much faster than the number of workers. (Ref. #1, pg23-34)

Social Security is safe today, but will run deficits in only 15 years. That's not very long to fix the world's biggest government program. The trustees believe the economy will slow in the near future because birth rates are low today. Fewer workers equal slower economic growth. Faster economic growth won't help much. Tax revenues will increase, but so will the amount that Social Security must pay in benefits. Economic growth could double and Social Security would still go broke. The trustees' "low cost" projections do show Social Security solvent for 75 years, but this assumes higher economic growth, increased birth rates, reduced improvements in life expectancies, lower unemployment, higher inflation, higher interest rates, a one-third increase in immigration, and lower incidence of disability. No one seriously believes this will happen. Many demographers believe life expectancies will increase faster than the trustee's project. If so, Social Security's deficits will be bigger- much bigger. (Ref. #5, pg9)

B. BENEFITS OF SOCIAL SECURITY

Social Security has been one of the most successful programs in this country. It is probably the primary reason for the dramatic decreases in poverty rates among the elderly. Poverty rates among Americans over age 65 decreased from 35% in 1959 to about 11% today. This is about the same as poverty rates among people of working ages. However, they are still pretty high for very elderly people, especially very elderly, single women. (Ref. #3, pg5)

Social Security is a very complex program with many benefits. If your average earnings are \$20,000 per year while working, you will have almost half (actually about 47%) of your earnings replaced by Social Security (or almost \$10,000 per year) when

you retire. If your average earnings are \$60,000 per year, you will have only ½ (actually about 27%) of your earnings replaced (or almost \$16,000). Thus, Social Security provides a safety net for those that have nothing else; (however, people really need to save more in order to maintain their standard of living). In addition, the more one pays in, the more one gets from Social Security, but the rate of increase decreases with income. This shows Social Security's goal of individual equity. Without this goal, people might try to avoid paying more in taxes, if they knew higher taxes would get nothing for them. These benefits are payable at the Social Security Normal Retirement Age, which is the age for full benefits; this was age 65 in 1999, however this age gradually increased for people born in 1938 and later. Social Security also has early retirement benefits. You can receive a benefit as early as age 62, but your benefit will be reduced to reflect the fact that you will receive it for more years. In addition, you can delay your retirement date and thereby get a larger benefit. Soon, the rules will automatically increase your benefit by 8% for every year that you delay your retirement (up to age 70), under the delayed retirement credit. (Ref. #3, pg5-6)

In addition, your retirement benefits from Social Security are guaranteed: they don't depend on how well you invested your money, they increase every year by the rate of inflation and they are payable for as long as you live. Currently, you can't buy inflation- indexed annuities from insurance companies and only a few private-sector pension plans in the country offer this. This is a very special Social Security benefit. Because of it, you don't need to worry about inflation's impact on your benefit or outliving your benefit, no matter how long you live, and you don't have to worry about how to invest your money.

Another benefit of Social Security is the disability benefit: If you become disabled, you can get the retirement benefits, even if you become disabled at a young age. This is an insurance benefit. The value of the disability benefit for an average young person with a wife or children could be almost \$200,000, which is much more than they would have paid in. An additional benefit is the survivor benefit. Your surviving spouse receives a benefit if she (or he) is caring for your child (or is disabled and over age 50). Both your surviving spouse and the child can get a benefit equal to 75% of your benefit.

It could be worth as much as \$400,000 for a person who died leaving a spouse and two young children, and would be worth much more than was paid in. After your surviving spouse reaches age 67, her (his) benefit can start up again at 100% of your benefit, even if she (or he) never paid into Social Security. Your spouse can get a spousal retirement benefit in addition to yours when you are both alive. Even if your spouse never worked, she (or he) would be eligible for a benefit equal to 50% of yours. The survivor and spousal benefits are also payable to divorced spouses if the marriage lasted at least 10 years (and the spouse hasn't remarried). This is valuable, especially for the traditional family where only one spouse works. Social Security has several other benefits as well. (Ref. #3, pg7)

The Social Security program paid monthly benefits to about 45 million people in year 2000: more than 28 million retired workers, 5 million disabled workers, and 12 million family members of retired, disabled or deceased workers. In general, workers are eligible for retirement benefits if they are at least age 62 and have had sufficient earnings on which they paid Social Security taxes in at least 10 years. Workers whose employment has been limited because of a physical or mental disability become eligible at an earlier age with a shorter employment history. Various rules apply to family members of retired, disabled or deceased workers. Although Social Security is often characterized as a retirement program, only about 63% of its beneficiaries receive their payments as retired workers. Most of those survivors are widows- either widows age 60 or older or younger widows who care for a minor child or who are disabled.

C. THE CHALLENGES OF SOCIAL SECURITY WITH THE AGING POPULATION

The baby boom generation (those born between 1946 and 1964) is 50 percent larger than the generation it is now supporting in retirement. The post-1964 "baby bust" generation, on the other hand, is smaller than the generation that it will eventually have to help support. Not only are there relatively fewer younger people, but the older people they are expected to help support in retirement are living longer as well. When Social Security began paying benefits in 1940, only about half of 21-year-old men could expect to reach 65 to collect benefits, and those who did, could expect to collect benefits for 12

years. By 1990, nearly 75 percent of 21-year-old men can expect to reach 65 and collect benefits for 15 years. These trends are expected to continue at least until the middle of the 21st century. At that time, an expected 83 percent of 21-year-old men will reach 65, and they can expect to live another 18 years. As a result, the Social Security Administration estimates that the numbers of beneficiaries will more than double by 2050. Moreover, because longevity has increased, this level of beneficiaries will tend to persist despite the baby bust. Longevity, then, can be expected to permanently change the age distribution of the population; even after the baby boom is gone, the number of people over age 65 will not drop substantially. (Ref. #6, pg6-7)

The impact of these demographic trends on the labor force will be dramatic. The traditional working-age population (those between the ages of 20 and 64) has increased by 13 to 20 million in each decade since 1970. However, it is expected to grow by only seven million between 2010 and 2020, and between 2020 and 2030 it is expected to actually decrease by 700,000. While the number of expected Social Security beneficiaries is doubling, there will be fewer potential wage earners entering the labor force. As a result, the potential number of workers supporting each person over 65 will plummet. Trends in labor force participation among workers over age 55 could make the situation even worse. Although people are living longer, they are not working longer. In fact, the average retirement age has decreased substantially over the past few decades, due in large part to the dramatic decreases in labor force participation among men. Between 1950 and 1985, the participation rates for men between age 55 and 64 declined from just under 90 percent to just over 65 percent. To stabilize the ratio of retirees to workers, U.S. fertility would have to surge back to the baby boom levels of the 1950s and early 1960s. That is not expected to occur. The United States already has one of the highest fertility rates in the developed world, and only 10 percent of Americans (as opposed to 50 percent in the 1950s) desire to raise families of the size common during the 1950s. (Ref. #6, pg8-9)

III. ALTERNATIVES FOR FINANCING SOCIAL SECURITY

A. MODIFYING THE CURRENT SOCIAL SECURITY PROGRAM

The Social Security system has enjoyed broad public support and served as a safety net for elderly Americans for decades. However, a flood of baby boomers on the verge of retirement and the relatively smaller number of younger workers to support them threaten the long-term solvency of the Social Security Trust Fund. The Social Security Amendments of 1983 were the last comprehensive changes made to the Social Security program. These Amendments raised the program's taxes and reduced certain benefits. The changes were intended to keep the program solvent for at least 75 years, until 2058. Since the mid-1980s, a relatively large amount of special-issue Treasury debt has accumulated in the Social Security Trust Funds, which is expected to grow even larger over the next decade. When members of the baby boom generation begin retiring in large numbers, around 2015, investment earnings on trust fund assets (and later the assets themselves) will be required to supplement payroll taxes so the program can continue to meet its benefit obligations. (Ref. #7, pg1)

Despite the large accumulation of trust fund assets, for a number of reasons, current projections are less favorable than those made in 1983. Social Security's Board of Trustees now projects that, unless the system is changed, the trust fund will run out of money about two decades earlier than 2058. Congress is considering far-reaching options for reform to restore Social Security to long-range, sustainable balance. If and when reforms are enacted, however, actual experience will inevitably diverge from the demographic and economic assumptions on which the changes are based, and Social Security may again slip out of balance. Congress can choose to address such imbalances by enacting new ad hoc changes or by establishing a mechanism to automatically adjust the program back into balance. (Ref. #7, pg1)

There are two general types of solutions. We can either decrease Social Security benefits or increase taxes (or investment income)

1. **Decrease Benefits**

There are at least five options to decrease (or delay) benefits. The first option addresses head on the fact that we are living longer; it would **raise the Retirement Age for full benefits.** Currently, Social Security's Normal Retirement Age, or full benefits age is 67, for people born in 1960 and later. Thus, Generation X'ers will have to wait until age 67 to get full benefits from Social Security, that is, two years longer than current retirees waited to get full benefits. Of course, since they are expected, on average, to live more than two years longer, they will get at least as many years of benefits as current retirees (on average). (Ref. #3, pg10)

One option is to increase the retirement age to 70 by the year 2030. Thereafter, this option would continue to increase the retirement age for full benefits (but at a slower rate), in order to keep the system from going out of balance in the future. Generation X'ers would have to wait at least three years longer to get a benefit compared with the current rules, although they would still get benefits for more years than people who retired in the early years of Social Security. This would affect a lot of people, which is why this option would solve over ½ of Social Security's current financial problems. Supporters of this option note that it makes sense since we are living longer, and we are healthier at older ages now. As I mentioned already, it could help solve about ½ of Social Security's financial problem. (In fact, if we raised the retirement age to 73, it would solve all of the problem- but I bet that Congress won't do that.) **Opponents** of raising the normal retirement age note that it could be difficult for people who have physically demanding jobs and others who can't find work, or for those who are partially disabled (but not disabled enough to get disability benefits). It could also increase the average age of the workforce and raise employer costs for wages and benefits, such as health care. Employers could encourage us to retire by improving our pensions, but that would cost a lot too. Some people question whether employers will hire us at older ages. They wonder if our health is improving as fast as our life span. Supporters cite recent studies, however, that indicate that we are healthier now at age 70 then people were at age 65 when Social Security was enacted. In addition, before Social Security most people worked to age 70 and beyond. Opponents also note that lowincome minorities with shorter life spans would be affected more by this provision. Supporters note, however, that they are helped by the progressive benefit formula of Social Security, so they will still receive better money's worth on average, than other groups. By the way, you can still retire at age 62 under the current rules, and if you do, your benefit will be smaller to reflect the fact that you will get your benefit for more years. For example, if and when the retirement age for full benefits becomes 70, then the benefit at age 62 would be 55% of your benefit at

age 70. Thus an increase in the retirement age for full benefits is a decrease in benefits (except for disability retirees-they would not be affected by an increase in the retirement age) and it does reduce the money's worth of our contributions, which is true for most solutions to fix Social Security. (Ref. #3, pg10-11)

The second option is to **Reduce the Cost of Living Adjustments** (or COLAs) that retirees get each year. Currently, benefits go up by the annual Consumer Price Index (or CPI) so that retirees can buy the same quantity of goods and services each year. However, some people think that the CPI overstates inflation rates. A Congressional Commission (informally called the Boskin Commission), reported that the CPI was too high by 1.1%. One suggested option might be to reduce the COLA to **CPI minus 0.5 percent**. If the Commission was correct, people's purchasing power would not go down and this could solve about **33%** of Social Security's financial problems, a very powerful correction just for a 0.5 percent reduction. (Ref. #3, pg11)

However, the Bureau of Labor Statistics has recently improved their calculation of the CPI. They expect it to lower the CPI by about 0.75%. Thus, **opponents** of this option are concerned that reducing the CPI further by 0.5 percent could mean that retirees would fall behind in purchasing power by 0.5 percent each year. (Ref. #3) Particularly hits the very elderly, where poverty rates are much higher than middle age people (especially for women). In addition, opponents want the calculation of the CPI to be a technical calculation, not a political decision.

The third option is to **reduce benefits by 5%**. This reduction could be phased in over five years, so current retirees (and those currently eligible to retire) would not be affected. People at all income levels would have their benefits reduced by 5%. This option would solve about **23%** of Social Security's financial problems. **Opponents** note that this would be especially difficult on people with low incomes, since they often rely on Social Security for all (or almost all) of their retirement income. This would also increase Supplemental Security Income (SSI) and Medicaid costs. **Supporters** think everyone should be a part of the solution, even people with low incomes. In response to the concern for low income people, they think that the progressive tilt in the benefit

formula is adequate and that making it more progressive would make the value of Social Security even worse for high earners. (Ref. #3, pg12)

The fourth option is to gradually reduce benefits for those retired people, whose total retirement income (including Medicare, which is about \$6000 per spouse) exceeds a certain level for example, \$45,000 per year. It is sometimes called an affluence test or means test. Once a family's total retirement income reaches \$110,000 in any year, one would get only 15% of his\her Social Security benefit. Thus, how one thinks about this option, may depend on where one stands. This option would solve 75% of Social Security's financial problem. Supporters note that this option preserves benefits to those most in need and reduces them for those who don't need them as much. **Opponents** note that the option hurts people who save more, a behavior we want to encourage not discourage. It could also discourage pensions. This option might also encourage abuse. People might hide their income, put their assets in trusts or give it to their kids, so that their Social Security benefit is not cut. In response, the government could write regulations to stop the abuse, which could become quite complex and intrusive. Another concern is that an Affluence Test could change the very nature of the Social Security program, moving it away from a universal program where benefits are based on how much you contribute to one based on need. Opponents would rather use the progressive tax system to handle this or make the benefit formula more progressive. (Ref. #3, pg12-13)

Another option is to increase the number of years for calculating your benefit, for example from 35 to 40. Currently, benefits are based on the highest 35 years of earnings. Additional years of work beyond 35 years do not improve the benefit much. One option would rise the 35 years to 40, which would solve 21% of the problem. If you worked full-time for at least 40 years, this option would not significantly change your benefit. However, if you didn't work full-time for at least 40 years, your benefit could go down by as much as 12%. Opponents note that this would have the unintended consequence of hurting women who take time out to take care for their families. Supporters note it would encourage people to work longer in order to get a better benefit. This would be good for the country because it would create more productivity,

and it would help bring in more contributions for Social Security. (This option makes the charge for early retirement more accurate. The current method doesn't reflect the fact that early retirees contribute less to Social Security.) Furthermore, supporters don't want to hurt women who stay at home for child birth and child care reasons. This problem could be remedied by providing women with "drop out" years for periods when they are carrying or caring for a child. (Ref. #3, pg13)

2. Increasing Taxes

The next three options would solve Social Security's problems by raising taxes. Option six suggests we raise the payroll tax rate. Right now, 6.2% of wages are paid into Social Security by the employee and with an equal amount paid by the employer. Self employed individuals pay both parts, for a total of 12.4% of earnings. This option would increase the total tax rate by 1% of wages (half to employees and half to employers), so that employees and employers would each pay 6.7%, for a total of 13.4% of wages. Supporters note that this would solve almost half of Social Security's current financial problems and that people prefer a tax increase over a benefit decrease. Raising the total payroll tax rate by 2%, to 14.6%, would solve the current financial problems of Social Security, if it was really saved. **Opponents** ask where the money would come from. Employers would have to raise prices if they could or lower their costs, such as labor costs. Low income people may take it out of their 401(k) contributions and lose their employer's matching contribution. Others might have to borrow more or to consume less. Opponents also note that we may have to increase payroll taxes for Medicare too, so that total payroll taxes could get much higher in total. In addition, as we continue to live longer, we will have to increase taxes every 20 or 25 years (unless we really save the money). This would tax future generations more than we were willing to tax ourselves today. It will be too late then for our children to cut our benefits or increase our retirement ages, so they could be forced into paying higher taxes than what we ever paid. Since this option is particularly difficult on lower income people, many would prefer that only higher income people pay more taxes. (Ref. #3, pg14)

A seventh option is to tax Social Security benefits like pension benefits from a private pension plan. In 1999, a retired couple with a \$20,000 pension and nothing else

would have been taxed around \$500. But if the income was all from Social Security, there was no tax on it. This is because you are not taxed on your Social Security benefits if your total income (including 50% of Social Security) is below \$32,000 (or \$25,000 if you are single). Above those thresholds, you are taxed on only half of your Social Security benefit. However, if this income is above \$44,000 (\$34,000 if you are single), then up to 85% of your Social Security benefit is taxable; not the whole benefit since your contributions were taxed already. (Congress chose 85% because approximately 15% of your benefit comes from your own contributions which have already been taxed; the rest of your Social Security benefit is attributed to investment earnings and your employer's contributions, which have not been taxed.) **Opponents** are concerned that this might hurt low and middle income people. However, Supporters note that low income people would not be touched by this proposal. In fact, 30% of retirees would pay no income tax due to the exemptions and deductions in the Federal Income Tax system. Only middle income people would be affected. This option wouldn't solve much of Social Security's financial problems (only 14% of the problem). Supporters also see this option as a way for all generations to be a part of the solution, even current retirees, and they note that it simplifies tax laws. They question why two retirees with the same income are taxed differently, just because one person gets their benefit from Social Security and the other doesn't. (Ref. #3)

An eighth option would require all newly hired State and Local Government workers to be in Social Security. Some state and local workers participate only in their own pension systems and don't participate in Social Security. This option would require new employees to be in Social Security. Supporters say that Social Security should be universal, and that most people support this option (except some of those who would be affected). Since many state and local workers get Social Security through work at other jobs, they should have to pay their fair share. Opponents note that these workers do fine under their own systems, so why change the rules. In addition, it would divert employee and employer contributions from their government plans. This option would bring more money into the system in the short run, but would solve only about 10% of Social Security's financial problems.

3. Unintended Consequences

We have discussed some of the possible solutions. However, there are problems that could accompany these solutions. *Decreasing Social Security benefits (or increasing the retirement age for full benefits)* may increase reliance on the private pension system. That would shift costs to employees and employers. People need a certain amount of income to live and retirement is a financial decision. With smaller Social Security benefits (or later retirement), many individuals would have to work longer (if they can). An older workforce would increase employer costs, such as wages and employee health, disability, life insurance, annual leave, and sick leave benefits. If employers don't want an older workforce and the associated additional costs, they could lay off their older employees (always a difficult thing to do) or encourage them to retire by improving the company pension plan, but that would also be costly.

Due to a huge increase in the number of retirements early in the next century, employers may want to rethink their retirement strategies and encourage employees to stay on (at least part-time). Phased retirement may become popular, but IRS regulations would need to be revised to allow in-service distributions to be payable before a pension plan's Normal Retirement Age. In addition, it is quite difficult for employers to increase their Retirement Ages in tandem with Social Security, unless pension laws were changed to allow higher normal retirement ages than age 65 and relax the rules against decreasing benefits. Otherwise, employers will have to calculate two separate pension amounts for service before and after each change in the retirement age. This would be very complex for employees to understand. However, it appears that Congress may want to allow employers some of the same flexibility (such as increasing the normal retirement age, decreasing benefits for early retirement etc). Finally, decreased Social Security benefits could necessitate changing the non-discrimination rules to reduce the disparity in benefits between low- and highly-compensated employees. (Ref. #3, pg17)

If Social Security COLA's are decreased, there will be more pressure on employer pension plans to give greater ad hoc increases to older retirees. It might encourage more lifetime annuity-type benefits and COLAs in pension plans. Employers with Defined Contribution plans might still be able to wash their hands of this problem, especially if all ties have been severed with the former employees by paying lump sums and not providing post-retirement of any kind. Employees should prefer Defined Benefit plans, especially if inflation could be high in their retirement, but they may not be thinking that far ahead. As mentioned earlier, a *means test* would discourage savings and pension plans. It would also confuse offset plans and the rules that integrate pension benefits with Social Security. The employer pension would affect the Social Security benefit, which would in turn affect the pension, and back and forth. Individuals who were clearly above the means testing threshold would need more income from their employer pension plan or they would need to save more. A means test would also encourage gaming the system. People would accelerate or delay their employer pension to get their full Social Security benefits. If the means test is based on income, people with large pensions would want to receive their benefits in a lump sum; so that they would only lose their Social Security benefit in one year. People with small pensions would not want a lump sum; because their pension would not reduce their Social Security benefit, but a lump sum would hurt them in the year of receipt. If the means test is based on wealth, people with large pensions might delay their pension for as long as possible or get it early in a lump sum and hide it or transfer it to a trust or child. (Ref. #3, pg17)

If we increase *Social Security taxes*, the money has to come from somewhere. Low paid employees may take it from their 401(k) contributions and lose the match. Highly compensated employees would be restricted because of non-discrimination rules. If the employee has no pension plan, the increased contribution would have to come from their savings or their consumption. If employers have to pay more into Social Security, they may reduce pension benefits or drop them altogether. If the wage base is increased or eliminated, it will affect covered compensation and integrated plans. If other forms of compensation other than wages are taxed (such as pensions and benefits or pension trusts), employers might reduce or drop them, due to the loss of tax advantages. If the health and pension benefit are not taxed, then it might encourage them to provide these. Obviously, there are repercussions involved in these proposed options. Unintended consequences should be considered before implementing changes such as these. (Ref. #3, pg19)

4. Private Sector Investments

So far the discussion has been about either decreasing benefits or increasing taxes. Another way suggested to help solve Social Security's financial problems would be to invest in the private sector, sometimes called privatization. Either the Social Security program administrators or individuals could do the investing. This option is quite controversial on Capital Hill, because the two political parties are split on which type of privatization they prefer (and possibly because there has been no experience with privatization in the United States). Currently, Social Security's Trust Funds can only be invested in government securities. Investing these funds in the private sector could yield Social Security a higher investment return. That would also reduce the arguments about whether the government really saves money when it buys Treasury Bills and securities. It could also increase national savings if additional savings were required on top of the current payroll tax. This sounds like a free lunch! However, it is not; like all other solutions discussed above, this change doesn't solve all of Social Security's current financial problems. We would still have to raise some taxes or cut some benefits, or do a little of both. These statements are true whether the Social Security administrators or individuals invest in the stock market, because Social Security has historically been a pay-as-you-go system. (Ref. #3, pg19-20)

Consider further these two approaches to **privatization**. Under the first approach, **Social Security** would hire investment managers to gradually invest up to 40% of its Trust Fund assets in the private sector. This option could solve about 40% of Social Security's financial problems. **Opponents** argue that with their assets reaching up to 5% of the total market, Social Security investment decisions and stock voting could become politicized. They also worry that a large Trust Fund might tempt Congress to improve benefits too easily. **Supporters** note that the government already invests in the stock market without these problems and using stock market indexes could avoid the concern that Social Security would manipulate the market. Proxy voting could be delegated to the money managers. In addition, they note that Social Security could get higher rate of investment return than if individuals did the investing, the administrative and investment expenses would be less, and there would be less risk to individuals. With respect to the

concern that Congress might use the money, supporters note that Congress would be less likely to use the money than now. (Ref. #3, pg20)

Alternatively, **individuals** could do the investing to avoid the concern over governance. **Supporters** prefer advance funding, want the higher return, and want to avoid reducing benefits as much as possible. They suggest that Individual Accounts (even with the risks placed on individuals) are the lesser evil, because they don't trust the government getting involved in investment decisions. Other supporters philosophically prefer individual responsibility over corporate responsibility and they like the idea of wealth accumulation for everyone. The Individual Account proposal would require all individuals to invest their payroll taxes directly in the private sector. They would then reap the better returns. Workers could have their own individual accounts and control their own investment decisions. It could be on top of Social Security, as a part of Social Security, or instead of Social Security. However, **opponents** note that this could have much larger administrative and investment costs than if the government did the investing. (Ref. #3, pg21)

In addition, there would be very large **transition costs** to change over to a totally privatized system. In 1996, when over 90% of Social Security's money was being paid out to current beneficiaries and the US Budget was in a deficit, most reform proposals suggested paying for the transition through **add-ons** (i.e., increased contributions to Social Security). **Supporters** noted that these proposals would increase national savings, investment, and productivity. **Opponents** asked where this money would come from. Some people worried that employees would take it out of their 401(k) contributions and lose the employer match. In addition, employers might take it from their pension contributions. Tax lobbyists say that add-ons are tax increases, even though the money would go to retirement accounts. **Supporters** of Individual Accounts point out that those additional benefit cuts could be offset by the increased benefits from the Individual Accounts. **Opponents** note that this only may happen if the stock market does well. In addition, they suggest that many people may not do well during the transitional period, because the advantages of investing in the private sector take time to build up.

B. SOCIAL SECURITY REFORM AROUND THE WORLD: LESSONS FROM OTHER COUNTRIES

Social Security programs in most countries, including the United States, follow the model first adopted in Europe: they are financed by mandatory payroll taxes and provide benefits to current retirees. A financial crisis facing these pay-as-you-go systems is approaching rapidly as fertility rates decline and life expectancies increase worldwide. A growing number of countries have taken steps to avoid the crisis by allowing workers and employers to choose private alternatives to their public retirement systems. At least 20 countries have introduced forced savings programs, requiring workers to save for their own retirement. A broad number of countries have either partially privatized their systems or have a private option; some countries require employers to provide pensions on top of the traditional Social Security program. (Ref. #4, pg1)

Chile was the first nation in the Western Hemisphere to adopt a Social Security system (1929) and the first nation in the world to completely privatize one. More than 90 percent of Chilean workers chose the private option soon after it was announced in 1981. Currently, employees pay 10 percent of their wages to the Chilean equivalent of Individual Retirement Accounts. Individuals cannot direct their own investments. However, they can choose among 21 competing private investment companies, which are similar to U.S. mutual funds. These funds are required to invest conservatively in a diversified portfolio of stocks and bonds. An employee dissatisfied with his or her fund can easily switch to another. Workers must also contribute to private life and disability insurance, bringing the total required contribution to about 13 percent. The benefits of this approach are compelling. Retirement benefits, which depend on the rate of return earned by private accounts, have generally been anywhere from 50 to 70 percent higher under the new system than the old Social Security program. (Ref. #8, pg2) Chile's reform has been such an overwhelming economic and political success that similar reforms have recently been adopted in Argentina and Peru; other countries across Latin America are implementing or considering similar reforms. (Ref. #4, pg2)

Like Chile, Singapore has a private retirement system. Unlike Chile's, Singapore's system was private from its inception in 1955. Residents are required to save for all manner of needs: retirement, medical expenses, education, even the purchase of a home. The rate of contribution for both employers and employees is 20 percent. In effect,

residents of Singapore are forced to save 40 percent of their incomes. At retirement – generally at age 55 – workers must purchase an annuity with a portion of their funds. The annuity pays a fixed sum for the rest of the individual's life, thus ensuring a steady stream of income. The country's pragmatic commitment to economic growth has assured a steady source of capital for investment and undoubtedly is responsible for the country's high economic growth rate. As a result of these high rates of contribution, Singapore has the highest saving rate in the world. It also has the highest home ownership rate, with about 85 percent of the population living in homes they own. (Ref. # 8, pg2)

European countries are also searching for private alternatives; Britain is leading the way. Britain's two-tiered system consists of a bottom tier (a minimum income paid to all retirees) and a second earnings-based tier that is comparable to a private pension. In 1978, the British government began permitting employers to contract their employees out of the second tier by providing them with a private pension at least as generous as the government pension they would have received. Since 1988, all British workers have been allowed to individually opt out of the second tier by setting up personal pension accounts, similar to American IRAs. Through these private options, more than 70 percent of British workers have moved out of the second tier. Individuals who contract out give up the right to draw a second tier pension from the state. In return, they receive a tax reduction of 4.8 percentage points. In general, the tax reduction is calculated so that employees will, on average, gain financially from contracting out. (Ref. # 8, pg3)

Virtually unknown, however, are the large number of countries that have at least partially privatized systems or a private option. In Switzerland, Denmark and Finland, the government provides everyone with a basic flat retirement benefit that is means-tested to some degree. Additional income related benefits, analogous to the earnings-related tier in Britain, are provided by mandatory employer pensions. In Japan and Mauritius, the government pays a flat retirement benefit to everyone, plus additional benefits related to earnings during working years. But workers with private employer pensions or occupational plans, providing at least equivalent benefits, are allowed out of the public earnings-related system. In Greece, workers with approved employer or occupational plans, providing at least equivalent benefits, are allowed out of the entire public system.

In Pakistan, employers provide survivor and disability benefits through private life and disability insurance. In Trinidad and Tobago and the Seychelles, the government requires participation only in a basic plan, paying a flat benefit to everyone. Payment into the earnings-related tier is voluntary, and workers can choose to pay into a private plan instead. (Ref. #4, pg3)

In addition, some countries with provident fund systems allow workers with an equivalent private-sector plan to opt out entirely of the public system. These include India, Sri Lanka, Nepal, Fiji and Gambia. Malaysia allows such a voluntary opt-out for teachers, soldiers, the self-employed and domestic workers. Some countries have no public Social Security system at all, leaving retirement benefits entirely in the private sector. These include Malawi, Burma (Myanmar), Georgia, Sierra Leone, Armenia, Azerbaijan, Bangladesh, Botswana, Somalia, Uzbekistan and Zimbabwe. In addition, the Ethiopian system applies only to government employees or employees of government enterprises or associations, leaving all other workers to provide privately for their retirement. (Ref. #4, pg3-4)

C. PERSONAL ACCOUNTS FOR SOCIAL SECURITY

Some analysts are calling for the U.S Social Security system to allow individuals to accumulate a portion of their Social Security contribution in an individual account, which could be invested in private markets. Advocates for this approach assert that it would provide workers with more control over their retirement security. A range of legislative proposals would require (or allow) workers to accumulate all or part of their Social Security retirement funds in accounts similar to today's individual retirement accounts (IRAs). The funds typically would be administered by professional investment managers. The government could restrict investment choices to reduce administrative costs and to provide workers with additional protection. However, individual account owners would make the basic investment decisions and accept the accompanying risks. (Ref. #9, pg1-2)

A fundamental question is whether individual worker participation in a privatized system would be voluntary or mandatory. If voluntary, the old system would have to continue indefinitely for those who choose not to participate. In this case, workers would

choose the option most favorable to their specific circumstances, adding to program costs. In addition, running dual programs would be more complicated and more expensive administratively. If participation in the individual account program became mandatory, and only a portion of the existing program was privatized, a two-tiered program would be necessary. For example, one tier would pay a government-guaranteed benefit; the other tier would contain an individual account component. Under some proposals, the government-guaranteed defined benefit would be flat, that is, not varying by income level, while the benefits derived from the individual accounts would vary both by income level and investment results. The flat benefit would be lower than current Social Security benefits, since part of the payroll tax would be used to fund individual accounts. (Ref. #9, pg3)

Under an individual account approach, investment risk shifts from the Social Security program to the individual. This transfer of risk could have a significant impact on the success of an individual account program. Some individual investors do not take a long-term view, due to liquidity needs or limited personal resources. Some individuals lack access to investment information and the necessary sophistication to make effective investment decisions. Additionally, individuals or even cohorts of workers cannot absorb the same risk as Social Security program as a whole, especially during periods when market values drop sharply. For both financial and psychological reasons, individuals are less able to ride out periods of poor market performance. Individuals could become even more risk-averse if the Social Security safety net were reduced to a minimum benefit or eliminated altogether.

Absent a government guarantee, individuals are also more vulnerable to losing their principal. Principal could be lost due to an issuer's bankruptcy, inappropriate investment advice, or even securities fraud. For these reasons, many individuals will steer a risk adverse course in directing their investments. Retirees and workers near retirement are especially likely to adopt conservative investment practices and receive lower returns.

In summary, if enough consistently high-yielding investment exists, and individuals invest in them, net investment yields under an individual account approach may be greater on average than under the current Social Security program. However, it

may not be reasonable to assume that individuals will earn the historically high returns of equity markets or the returns realized by traditional employer-provided pension plans. Workers will need investment education to ensure they recognize the opportunities as well as the risks of the private market. Lower paid workers, in particular, will need education, because many of them will have no prior investment experience. It should be noted that individuals, regardless of their level of investment education or financial expertise, will still be vulnerable to fluctuations in the private market, especially at the time that they expect to retire. (Ref. #9, pg4)

Over the long term, a funded system could pay higher benefits at lower cost than the current pay-as-you-go program. But to get to a funded system, we have to put up the funds. That's true whether we fund Social Security through personal accounts, collective government investment, or by retiring existing public debt. When someone talks about the "cost" of personal accounts, they are really referring to the amount we would put aside today to help pay benefits tomorrow. Is that really a cost? Personal accounts are no more "expensive" than any other means of pre-funding Social Security; they are a lot cheaper than raising taxes down the road. Personal accounts would be split 50-50 between divorcing spouses. These assets, left to compound until retirement, could significantly increase the benefits for women who might otherwise retire into poverty. African Americans do rely disproportionately on Social Security's disability protections, but adding personal accounts for retirement can make the system more progressive and fair. (Ref. #2, pg25)

Some argue that the economy will slow in the future, so stock returns will also fall. No one knows for sure, but stock returns, which have averaged seven percent, would have to fall a lot to be below Social Security's two percent returns. Social Security's independent actuaries forecast 6.5 percent real annual stock returns.

Some argue that ordinary workers couldn't manage their own money. But millions of ordinary workers have already begun investing successfully through IRA and 401(k) plans. Average workers, aged 60-65 and earning \$15-25k, have just 23 percent of their 401(k) account in stocks. Workers in dozens of countries around the world have already invested in personal accounts. Are workers in Chile, Australia or Mexico smarter

than Americans? What the opposition is really saying is "low-income workers are too stupid to invest." This is patronizing and demeaning. (Ref. #5, pg35)

At retirement, individual accounts could be converted into annuities that pay a fixed monthly income. These annuities could be designed to pay increasing benefits, so that payments would approximately reflect changes in the cost of living. While Social Security benefits are indexed directly to the Consumer Price Index (CPI), such indexing of private annuity benefits is not generally available. One consideration is whether insurance companies would be able to offer CPI-indexed, or inflation-indexed annuities. Another basic question is whether benefits derived from individual accounts could be paid in forms other than life annuities, and under what circumstances exceptions would be permitted.

Preservation of capital during the working years is a serious issue, as many workers have legitimate needs: health-care, emergencies, unemployment, natural disasters, etc. these workers would seek to withdraw (or borrow) funds from their individual accounts for non retirement purposes. The evolution of loan provisions in current 401(k) and IRA plans illustrates the issues involved. Initially, these funds were off-limits until retirement. If funds were withdrawn, a stiff tax penalty was imposed. Then, as workers clamored for access to meet important pre-retirement financial needs, loan provisions were enacted into law. If retirement funds cannot be preserved and used for retirement, workers could actually be worse off in retirement under a privatization arrangement than under the existing program, even with an increased level of funding and higher rates of return in the private equity market.

Preserving funds after retirement poses yet another problem. Individuals, who do not convert their accounts into annuities at retirement, risk the possibility of outliving their resources, especially if the individual account is their primary source of income. Without the restraint provided by a lifetime Social Security annuity or pension payment, some retirees may consume their individual account balances too rapidly. A large group of people with a sharply reduced standard of living could place heavy burdens on government safety nets. (Ref. #9, pg3)

Administrative costs of the existing Social Security program are very low, less than one percent of outflow. Critics of privatization question whether private-sector investment managers could match this. In addition, there would be new costs associated with privatization, including marketing expenses and possible commissions, collection, enforcement, allocation, educating the public on investing, new record keeping requirements, etc. Higher costs would partially offset the expected higher investment returns and affect the level of benefits available from the individual accounts. Privatization advocates counter that Social Security's administrative costs are low partly because employers provide much of the program's administrative work. Individual Account proposals could also reduce administrative costs by taking advantage of the current infrastructure for tax collection. For example, employers could send their employees' Individual Account contributions to the government with other taxes they are required to file in a bulk check. The government would hold the contributions (plus interest) until they identified how much each worker contributed through income tax returns. The government would then forward the appropriate contribution to the individual's chosen investment manager. Under this procedure, there is a period of time (up to one year in some instances) that workers would not have investment control over a portion of their accounts. This could be important during times of market volatility. (Ref. #9, pg3)

Under Social Security's current system, the program's continued existence depends on receiving future tax income to meet obligations to current and near term beneficiaries. If payroll taxes are diverted into private accounts, benefits would need to be reduced, or taxes would have to be increased to meet the program's benefit obligations. Moreover, to the extent that Social Security's trust fund build-up masks the government's deficit, any reduction in the trust fund build-up hurts the unified budget. For these reasons, most individual account proposals would have to be phased in over several decades, providing enough income to pay benefits to current retirees, while simultaneously building up substantial private accounts for younger workers. Under some proposals, individuals who already had benefits accrued under the existing program would be treated differently. The youngest workers, perhaps those under 30, might forfeit

all accrued benefits under the existing program. Middle-aged workers might get some past-service credit but not accrue additional benefits. The oldest workers, those closest to retirement, might not see a decrease in their initial benefit, but their cost of living increases could be reduced, or they might have to pay higher payroll or income taxes. To pay benefits to these workers and to current retirees, additional revenue would be needed for several decades. In effect, several future generations would have to finance their own retirement and maintain the existing program for their elders.

There is a lot of speculation and uncertainty about the effectiveness of privatization by many people, including policy makers in the United States. But there was almost the same concern about personal accounts in most of the countries which had replaced their old Social Security systems with the new private systems. The next chapter analyzes how Chile successfully switched its long-term problematic Social Security system from pay-as-you-go basis to pre-funded private system.

IV. CASE ANALYSIS OF PRIVATIZATION

A. PRIVATIZATION THROUGH IRA ACCOUNTS IN CHILE

Chile was the first nation in the Western Hemisphere to adopt a Social Security system (1929) and the first nation in the world to completely privatize that system. The Chilean system involves forced saving for retirement and adverse contingencies; it has much in common with the provident fund systems of Singapore and other former British colonies. Since Chile allows competition among private companies that manage the individual savings accounts. Because workers are free to choose among portfolio managers, the Chilean system in many ways is similar to a U.S.-type IRA system. (Ref. #4, pg12)

1. The Old Social Security System

The old Chilean Social Security program was patterned after the traditional social insurance programs in Europe. The system paid retirement, survivors, and disability benefits and was financed by a payroll tax that eventually was over 20 percent of wages. The employer paid more than half of this tax, and employees paid the remainder. The system accumulated some reserve funds, which were invested, but it was far from fully funded. Instead, it tended to operate on a pay-as-you-go basis. In the years prior to its dismantling, revenues were routinely insufficient to pay promised benefits. In 1980, general tax revenues financed 28 percent of the system's benefits, and the annual Social Security deficit was projected to grow sharply in future years. (Ref. #4, pg12)

The old system actually consisted of many separate Social Security systems: one for manual workers, one for salaried employees, one for government workers and about 50 additional programs for workers in different occupations and locations. (Ref. #4, pg12-13) One unfortunate consequence of this diversity was that the groups with the greatest political influence had the most favorable programs. For example: some salaried workers received retirement benefits equal to 100 percent of average wages for their last five years of employment, while manual workers received only 75 percent: Some workers paid lower payroll taxes than other workers for similar benefits: Under the general system for salaried workers, pension payments were indexed for at least two years, whereas the general system for manual workers had no automatic inflation-

indexing. The special benefits and tax breaks almost always favored politically influential, higher income workers. Low and middle income workers usually had to pay higher taxes to finance these special benefits. Workers who knew they would not qualify for more than the minimum benefit (unrelated to contributions) often would collude with their employers to underreport wages so both could pay less in payroll taxes. Workers who expected more than the minimum benefit also would collude with their employers to underreport earnings prior to their last five years of work, because earnings in earlier years were not counted in calculating benefits.

The Social Security funds were also poorly managed. Administrators of the funds were subject to political influence in making investment decisions, and sometimes invested funds in projects managed by friends. As a result, the funds often earned a low rate of return and capital was not allocated to its most productive uses. Such practices made the Chilean economy less efficient and slowed its rate of economic growth. Since pensions in payment were either not indexed for inflation or had only limited indexing, many retirees observed the real value of their benefits decline during the 1970s, when annual inflation rates under the Allende regime exceeded 1,000 percent. (Ref. #4, pg13)

2. The New Social Security System

In 1981, the government of Chile adopted sweeping reforms to address the old Social Security's financial problems. The reforms created a new system relying on private, fully funded retirement programs rather than a public Social Security system. Under the reform, workers who had participated in the old system were given the option to stay with the old system or to switch to the private system after 1986; all new entrants into the work force were required to participate in the private system.

Under the new system, each worker who opted for private coverage is required to make a monthly tax-deductible contribution equal to 10 percent of wages to an individual pension savings account. The worker can voluntarily make additional tax-deductible contributions of up to 10 percent of wages. These funds are invested, and the investment income accumulates tax free. The government has authorized 21 private investment companies, known as Administradoras de Fondas de Pensiones (AFPs), to administer and invest the individual account funds. The companies were specially created for this purpose and are not allowed to engage in other business or financial activities. Several American investment firms are now involved in owning and operating AFPs. New

York-based Bankers Trust has a 42 percent ownership share of the largest AFP, Provida, which holds 25 percent of the private system's assets. Aetna Life and Casualty of Hartford owns 51 percent of the second-largest AFP, Santa Maria. Workers are required to place their account with one of the 21 investment companies, although they can switch their account among the companies on short notice. The companies can invest in government and corporate bonds, mortgages, stocks, bank certificates of deposit and other financial instruments, but they are required to hold a diversified portfolio with limited risk. At the end of 1990, the AFPs had invested 44.1 percent of their funds in government bonds, 17.4 percent in bank time deposits, 16.1 percent in mortgage bonds, 11.3 percent in common stocks and 11.1 percent in corporate bonds. Until now, investment in foreign stocks has been prohibited, but reforms expected to be adopted soon will allow some foreign investment. Each company is required to provide a minimum rate of return on pension account funds, set as an average of the percentage of the average return earned by all 21 companies. The government guarantees this minimum return, which in effect means that the government is the insurer of the last resort. (Ref. #4, pg14)

At retirement, workers can use the funds accumulated in their accounts to finance their retirement benefits in one of three ways: they can use all of their funds to buy an annuity from an insurance company that pays a specified annual income for life plus survivors benefits for their dependents, backed by a government guarantee; they can keep their account with the investment company and make periodic withdrawals, leaving the remaining funds in their estate to be passed on to their children or other heirs; or, if they have more than enough funds in their accounts to pay normal expected benefits, they can withdraw the excess as they choose. The amount of retirement benefits an individual will receive depends on the rate of return earned by the private account investments.

The reform was structured with the expectation that employees contributing the required amounts into the system over their entire working lives would receive retirement benefits equal to 70 percent of their final salary, plus survivors benefits (survivors benefits are equal to 50 percent of the worker's retirement benefits for a surviving spouse or dependent parents, and an additional 15 percent for each dependent child). This is a high benefit level, since 70 percent of final salary generally is considered sufficient by itself to enable retirees to maintain almost the same standard of living they enjoyed during their working years. By contrast, the U.S. Social Security system pays about 42

percent of previous income for average income employees. Some estimate that retirement benefits under the private system in Chile are 70 percent higher than under the old system. (Ref. #4, pg15)

The retirement age under the new system is 65 for men and 60 for women. Employees might retire earlier if they have accumulated sufficient assets to pay at least 50 percent of their average earnings over the previous 10 years and 100 percent of the minimum wage (which is approximately \$170 U.S. dollars per month) ("EL Mercurio" Newspaper Dec. 2002). Workers also might choose to retire later, with their funds continuing to accumulate. The government guarantees a minimum pension benefit to all employees under the private system, supplementing the employee's private benefits to the extent necessary to achieve the minimum. The amount of this minimum pension benefit is 85 percent of the minimum wage, increased to 90 percent for retirees age 70 and over. Chile's minimum wage is about half of its average wage. Thus, the minimum pension benefit guarantee under the private system is equal to about 40 percent of average wages, which is about what the U.S. Social Security system pays to average income employees. (Ref. #4, pg15) Employees under the new system also are required to contribute additional funds to purchase private life and disability insurance. These funds are added to the employee's AFP and are used to purchase coverage from private insurance companies. The additional contributions for this purpose vary among the AFPs, but the average is 1.5 percent of wages.

The private insurance policies replace the benefits paid by the old system for disability or death occurring during the worker's pre-retirement years. The disability policy, along with funds accumulated in the worker's retirement account, pays a monthly benefit for the rest of the worker's life equal to 70 percent of average earned wages during the 12 months prior to disability. The life insurance policy, along with the worker's retirement funds, pays the same benefit (as a percentage of income) to a surviving spouse, dependent parents and dependent children as is paid to the survivors of retirees. The disability benefits under the new system amount to at least twice as much as under the old system, and the new system's survivor benefits are at least 50 percent more. In addition, the government guarantees the same minimum benefit for disability as for retirement, and it guarantees minimum survivors benefits as well. (Ref. #4, pg15)

Administrative fees for the AFPs are as low as one percent of wages on average, and the total payments required under the private system are approximately 13 percent (10% of wage for old-age pension; 3% of wage for survivor and disability pension and administrative fees). This represents a reduction of about 40 percent from the total taxes paid into the old system (20 percent). All benefits under the private system are indexed for inflation. The agreements for retirement annuities are written to leave the insurer responsible for maintaining the real value of promised benefits each year. Similarly, the agreements for disability and life insurance coverage require the insurer to maintain promised benefits in real terms. The government-guaranteed minimum benefit is also indexed for inflation. This inflation protection is visible because the private capital market regularly pays a rate of return in excess of the rate of inflation. Many investments are made in real terms with the borrower obligated to pay back the real value of the loan plus a fixed amount of real interest.

Under the private system, employers no longer pay payroll taxes. But they were required to pay all employees an 18 percent wage increase at the time the privatization was adopted. For employees under the new system, this meant a net increase of about 10 percent in take-home pay, after they made the required contributions for retirement and survivors and disability insurance. Employees continuing under the old system now bear the full burden of the payroll tax for that system. With the mandated 18 percent wage increase, workers remaining in the old system were left with about the same take-home pay as before the reform. For those who made the switch, the government issued special nontransferable bonds called recognition bonds. This was to compensate them for their past contributions to the old Social Security system. The bonds represented a sum almost equal to the proportion of benefits already earned under the public system by past contributions. The sum is indexed to increase with inflation and earns interest until the employee retires. The accumulated sum will be added to the funds in the worker's individual retirement account to finance the employee's retirement benefits. Employees under the private system are also eligible for the government-guaranteed minimum benefit. All employees who switched to the private system are assured of receiving payments at least as high a benefit as promised under the old system, and probably higher. (Ref. #4, pg16-17)

The government finances the recognition bonds, minimum benefits and benefits currently being paid under the old system out of general revenues. The reform also abolished an additional payroll tax of more than 10 percent, which financed unemployment insurance, workmen's compensation and family assistance benefits. These benefits are now paid out of general revenues, and a value-added tax was adopted to help finance them. (Ref. #4, pg17)

The privatization has been highly popular and successful. More than 90 percent of the employees in the old Social Security system have voluntarily opted for the new private system. Employees who did not do so were mainly those close to retirement without enough working years left to qualify for minimum benefits under the private system. The new system completely eliminates the chronic long-term financing problems of the old system because benefits are based strictly on the employees' accumulated savings. As a result, general revenue contributions to cover chronic deficits and payroll tax increases to avoid long-term financial gaps are no longer required. The new system improves the employees' freedom of choice and gives them full control over own resources. The private retirement investment accounts are completely portable, following the employee from job to job, so the system does not limit choice in employment. Employees can put additional funds to their accounts, up to double the needed 10 percent of wage income. With the additional contributions, employees can retire early or receive higher benefits at the normal retirement age. They also can delay their retirement without penalty. Instead, a later retirement increases the benefits they will get at a later retirement age. (Ref. #4, pg17-18)

In comparison to the public bureaucracies that administered funds under the old system, the new private retirement account funds are administered by private companies subject to intense competition. Employees have the legal right to move their account funds from one company to another. They also have access to current information regarding their funds and receive regular quarterly reports.

The investment returns on funds in the private retirement accounts have been quite high. The latest available data show that the funds have earned an average real rate of return of 13 percent since the new system was

adopted. This performance has greatly exceeded expectations and would result in substantially higher-than-projected benefits, even if returns should fall substantially in future years. As a result of the heavy participation in the new system and the high returns earned on retirement investments, the retirement funds have grown rapidly: By the end of 1990, the total assets of the AFPs equaled about 25 percent of the total assets of the entire banking system; By the end of 1992, AFP assets were equal to about 40 percent of Chile's entire GDP; The savings rate in Chile is reportedly more than 25 percent, which the government attributes primarily to the Social Security reform. (Ref. #4, pg18)

Under the new private system, employees in Chile will receive far higher benefits than under the old system, while paying far less. Retirement benefits under the private system are estimated to be at least 70 percent higher than under the old system. Yet payments into the private system are about 40 percent less than under the old Social Security system. The new system's survivors and disability benefits are at least 50 percent higher. (Ref. #4, pg18-19)

Indeed, due to the private retirement accounts, in less than 10 years the average Chilean worker will have more assets than the average American worker. Already, while the average Chilean earned only about \$5,400 in 1994, these workers on average had accumulated roughly \$21,000 in assets in their private retirement accounts. In the U.S., while median family income was \$36,812 in 1992, median household wealth was only around the same level. (Ref. #4, pg19)

Former Labor minister, Jose Pinera, the principal architect of the new system, argues that the lack of a direct link between payments and contributions under the old system is what caused it to deteriorate into a morass of special and arbitrary privileges. Benefits under the private system are based completely on past contributions and returns, so there is no real reason for special interest groups to demand special benefits. The direct link between contributions and benefits under the private system should avoid the widespread tax evasion that prevailed under the old system. If employees contribute less than needed, they will receive less in benefits. Since employers no longer pay payroll taxes, they no longer have an incentive to underreport wages. Under the new system, employment and job opportunities are increasing. Improved savings and capital investment from the private system encourage job creation and higher real wages. The extreme reduction in payroll taxes under the privatization also supports job growth. High

payroll taxes discourage both employers from hiring and employees from working. Pinera suggests that the private contributions are perceived less as a tax and more as personal savings that enhance the workers' personal wealth and are part of their employment compensation. The depressing effect of the old system's heavy payroll tax burden has been reduced even further and the new system will result in still more jobs and increased employment. (Ref. #4, pg19)

Employees are cultivating substantial direct ownership in the nation's private business sector through investments in their private retirement accounts. This means more ownership of private companies, which is appealing to many in its own right. The new private system has also changed public opinion toward private enterprise. Employees are now more inclined to support public policies that create and maintain free markets and enhance the long-term growth and prosperity of Chilean enterprises. Pinera argues that the change in public opinion resulting from Social Security reform helped to make fundamental trade union reforms possible. With more of a direct personal stake in private enterprises, workers became much less supportive of militant union demands that threatened to damage those enterprises, workers began to favor efforts to increase cooperation with management and enhance the ultimate success of firms. The 10 percent take-home pay increase for employees under the new retirement system also helped ease the transition to the new trade union system. (Ref. #4, pg20) The new private system also helped to make possible other Chilean privatization policies. The Chilean government had owned numerous inefficient, heavily subsidized enterprises that it sought to sell to the private sector. The new funds flowing into the private investment accounts have expanded the capital markets and their ability to absorb shares in these state enterprises as they were sold to the public.

Over the long run, Social security reform in Chile will shift the provision of fundamental retirement and insurance protection for workers from bureaucratic, monopolistic, public sector programs to competitive free markets. The reform creates a new system based on individual economic liberty, freedom of choice and workers' control over their own resources. The new system does retain substantial continued government involvement through supervision, regulation, guarantees and the payment of minimum benefits. But the reform probably involves the single most massive dismantling of public sector social insurance in modern history. Eduardo

Aquilera, a top union leader in Chile and an original opponent of the reform, now evaluates the new system this way: I have always believed in the saying 'the money where my eyes can see it' ["la plata donde mis ojos te vean"] and in the AFP system my money goes to my individual account and is mine, and the government cannot use it as they see fit. After 14 years, I am now enthusiastic about [the reform]. I have U.S. \$100,000 in my pension account [on annual income of U.S. \$18,000] and that is the best guarantee of my future pension. The bottom line is that the private system has been an enormous advancement for the Chilean workers. Similarly, Robert Myers, Chief Actuary of the U.S. Social Security Administration from 1947 to 1970 and an opponent of a private option for Social Security in the United States, evaluated the new private system in Chile this way: in summary, the new system — both as to its design and as to its performance — is excellent. (Ref. #4, pg20-21)

B. CONCLUSION

Chile's success in transferring the retirement pension system from a "pay-as-you-go" basis to a fully privatized personal account system was not free of opposition. Many Chileans, including employees who support and believe in individual economic liberty, freedom of choice and workers' control over their own resources, were not so sure whether or not the new private system would provide better retirement benefits. This Chilean privatization model, which has been widely adopted in Latin America (e.g. Peru and Argentina,) could be applicable and useful for other countries that are facing long-term Social Security financial problems. It may not be required to copy the Chile's model as it is, but by studying it they can learn valuable lessons and avoid serious mistakes.

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V. RECOMMENDATIONS AND CONCLUSIONS

A. RECOMMENDATIONS

As shown from the previous chapters, America's Social Security system is in trouble. Its retirement policies need to change significantly. Almost everybody agrees on the need and importance of the reform, but there is no simple, cheap, and single solution which would satisfy all parties' interests and solve the Social Security's financial problem. Based on the above broadly discussed reform alternatives and other countries' similar experiences, I recommend three basic reform proposals in a priority order. I believe that they could help to solve the serious financial problem of the United States Social Security system, if policy makers apply them properly without political influence.

1. Privatization

Privatized Social Security has succeeded when tried. There is no indication of failure or dissatisfaction by any nation which switched from a pay-as-you-go Social Security system to a new private system. A number of nations, including Chile, Australia, Great Britain, Hungary and Singapore, have switched from untrustworthy pay-as-you-go government Social Security systems to retirement programs based on private savings and investment. Both the individuals involved and these countries' economies have prospered from the switch. I do not see any reason why a private system as proven by other countries would not work to solve the serious long-term financial problem of the United States' Social Security system.

Many people are critical that the American Social Security system provides scandalously low retirement income in exchange for record-high payroll taxes. I am confident that privatization would change that. One method would allow employees to divert 75 percent of their Social Security tax payment into private accounts, while the remainder would finance benefits for current retirees. Obviously, a lot of things need to be considered (such as transition costs, who will manage the accounts, etc.) when policy makers start to implement this option.

2. Raise the Payroll Tax <u>and</u> Increase the Number of Years for Calculating Benefits

As discussed in Chapter III, raising the payroll tax rate by one percent of wages would solve 50 percent of Social Security's current financial problems. Increasing the number of years for calculating benefits, for example from 35 years to 40 years, would solve 21 percent of the problem. Therefore, if policy makers were to implement both these proposals together, they could solve almost 71% of the problem. These proposals would have relatively limited unintended consequences compared to most other proposals and likely better support for solving the current Social Security financial problems.

3. Raise the Payroll Tax Rate

The third option would be to raise the payroll tax only. Increasing the total tax rate by one percent of the wages (half to employees and half to employers), is still a powerful proposal with limited possible side effects; it could solve about half of the Social Security's current financial problems. Most people prefer a tax increase over a benefit decrease. This proposal is much better than doing nothing.

B. CONCLUSIONS

In general, the American Social Security's financial problems are very complex and closely tied to the nation's total budget. As a result, any changes would be influenced by many politicians and interest groups. These interested parties all make it very tough issue to deal with. But doing nothing would be a huge mistake. If the politicians of both parties do not have the political will to solve the Social Security problem now, there will be little hope to do so when the baby boomers start collecting Social Security as well as Medicare and Medicaid benefits.

Reformers in the United States can learn several lessons from the experiences of other countries around the world. In implementing their systems of funded private accounts, these countries have grappled with problems that the U.S. will face, as U.S. policymakers decide how to shape their system. Their solutions are not necessarily 100% right for the United States, but these solutions do provide reformers with a menu of tested options. The potential solutions are there. To implement them will take political courage and the determination of the American people.

LIST OF REFERENCES

- 1. Congressional Budget Office, "Social Security: A Primer September 2001" [http://www.cbo.gov/showdoc.cfm?index=3213&sequence=1]. 28 May 2003.
- 2. Michael Tanner and Andrew G. Biggs, <u>Social Security 101: The Program and the Problem</u>, Social Security University, August 26, 2002.
- 3. Ron Gebhardtsbauer, <u>Social Security Options and Their Effects on Different Demographic Groups</u>, American Academy of Actuaries, June 21 1999.
- 4. Peter J. Ferrara, John C. Goodman and Merrill Matthews Jr., <u>Private Alternatives</u>
 <u>To Social Security in Other Countries</u>, NCPA Policy Report No. 200, October 1995.
- 5. Andrew G. Biggs, <u>Personal Accounts for Social Security: Facts and Fantasies</u>, Social Security University, August 27, 2002.
- 6. John H. Trout, Ken Krehbiel and David F. Rivera, <u>Financing the Retirement of Future Generations: The Problem and Options for Change</u>, American Academy of Actuaries, Public Policy Monograph 1998 No. 1.
- 7. Richard C. Lawson, Noel Card, M. Todd Tuten, <u>Automatic Adjustments to Maintain Social Security's Long-Range Actuarial Balance</u>, American Academy of Actuaries, Issue Brief, September 2002.
- 8. National Center for Policy Analysis, "Social Security Reform: Other Countries Are Leading the Way" <u>Brief Analysis No. 212</u>, for immediate release: Friday, August 30, 1996, [http://www.ncpa.org/ba/ba212.html]. 27 June 2003.
- 9. Ken Steiner, Ron Gebhardtsbauer and John H. Trout, <u>Issues Regarding Social Security Individual Accounts</u>, American Academy of Actuaries, Issue Brief, Winter 1998.

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